Utah

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HISTORIC AMERICAN ENGINEERING RECORD

HAETR WTAH OGDEN ARSENAL, SMOKELESS POWDER MAGAZINE 6-LAY.V, (OGDEN ARSENAL, BUILDING 1932) (OGDEN ARSENAL, QUARANTINE/CONTAINMENT STORAGE) 1AT-(OGDEN ARSENAL, MUNITIONS STORAGE)

HAER No. UT-84-AT

Location:

7870 North Drive, Hill Air Force Base, Layton Vicinity, Davis County, Utah

Note: For shelving purposes at the Library of Congress, Layton Vicinity in Davis County was assigned as the "official" location of Hill Air Force Base. However, Building 1932 is actually in the Ogden Vicinity of Weber County.

UTM: 12-414920-4556780

Date of Construction: 1942

Architect:

Unknown

Builder:

Unknown

Present Owner:

Hill Air Force Base

Present Use: Munitions Storage

Significance: Building 1932 provides particularly vivid insight into the processes involved in the manufacture and storage of munitions. In addition, this building contributes to an understanding of the U.S. Army build-up which occurred on the eve of and during World War II.

History:

The introduction of various types of ammunition manufacture at Ogden Arsenal during World War II necessitated the construction of many new buildings which took various forms as related to their specific functions within the overall manufacture and storage processes.

Building 1932 is one of several standard service magazines designed for general military use by engineers at the Picatinny Arsenal. These buildings were designed to store high explosives, primers, and igniter cartridges. At Ogden Arsenal, such buildings (which included Building 2135 in the West Loading Plant and Building 2237 in the East Loading Plant) formed part of the loading line for 37mm anti-tank ammunition.

The standard design was modified during construction to suit Ogden Arsenal's specific needs. The original drawings sent from Picatinny Arsenal indicate that the buildings were to be elevated approximately 4'-0" above grade. However, each of these structures at Ogden Arsenal sit on grade. This design change may reflect the shock-absorption quality of the sandy soil available at this arsenal as compared to Picatinny, which made in-ground foundations safer. Another building feature inconsistent with the original design is the partial hip roof canopy along the west elevation. This canopy appears to be original to the building and may have served as a sun screen for the west elevation to prevent ammunition from getting hot in the afternoon sun.

The concrete frame and hollow tile infill walls of Building 1932 were designed to fall outward in the event of an explosion. Like other buildings of this type at Ogden Arsenal, Building 1932 is flanked on two sides by an "L" shaped berm the height of the building that was meant to protect other areas of the plant from potential explosions. All of the arsenal buildings which stored volatile materials were equipped with a lightning "aerial" that came through the vents and was connected to shorter aerials along the ridge of the roof. Periodic lightning drills were run during World War II to prepare for operations during stormy weather.

General Description:

Description: Building 1932 (32'-4" x 20'-10") is a one-story, gable-roofed building, located in the original North Loading Plant area. It is framed with reinforced concrete columns that articulate two bays on each facade. The walls are infilled with the hollow red tile characteristic of the "arsenal" style. Each bay of the building contains a double blast door on the north entry elevation and a nine-pane hopper window on the south. The roof of the building is of the typical arsenal 4:12 pitch and is covered with corrugated asbestos, with two round vents integrated among the lightening "aerials" (rods) on the ridge line. An earthen "L" shaped berm encloses the building on two sides.